

We claim

✓ 1. A method of manipulating semiconductor substrates comprising placing a semiconductor substrate on a transportable electrostatic carrier, and keeping the semiconductor substrate placed on the electrostatic carrier for the duration of and between at least two processing steps of the semiconductor substrate.

2. The method according to claim 1, wherein the transportable electrostatic carrier has a thickness of 0.3 - 2.5 mm, comprising using the electrostatic carrier and the wafer placed thereon in unmodified or little-modified machines for processing semiconductor substrates.

3. The method according to claim 1, wherein the transportable electrostatic carrier is a component of an electrostatic carrier system, further comprising inductively charging and discharging without contact the electrostatic carrier system.

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4. The method according to claim 1, wherein the transportable electrostatic carrier includes an integrated electrical charging and/or discharging device, comprising supplying the charging and/or discharging device by a battery or an accumulator.

5. The method according to claim 4, comprising controlling the transportable electrostatic carrier for electrostatically charging and/or electrostatically discharging by remote control.

6. The method according to claim 1, comprising electrically charging and/or discharging the transportable electrostatic carrier separately in one or more mobile or stationary transfer stations.

7. The method according to claim 6, comprising recharging or discharging the electrostatic carrier in a charging station of a processing machine.

8. The method according to claim 1, comprising monitoring and/or controlling the steps of securing and/or separating the wafer from the electrostatic carrier by means of position sensors.

9. The method according to claim 1, wherein the transportable electrostatic carrier is used in a unipolar or bipolar electrostatic system.

10. The method according to claim 1, comprising labelling the electrostatic carrier with an electronic label for facilitating sorting and following a production sequence of individual semiconductor substrates.

11. An electrostatic carrier system for manipulating semiconductor substrates, the system comprising at least one transportable electrostatic carrier for a semiconductor substrate and at least one transfer station for transferring the transportable electrostatic carrier with the semiconductor substrate placed thereon between processing steps.

12. The system according to claim 11, comprising an integrated electrically charging and/or discharging device for the transportable electrostatic carrier, and a battery or an accumulator for supplying the electrical charging and/or discharging device.

13. The system according to claim 12, comprising a remote control for the charging and/or discharging device.

14. The system according to claim 11, comprising position sensors for monitoring and/or controlling the position of the semiconductor substrate.

15. The system according to claim 11, wherein the system is a unipolar or bipolar electrostatic system.

16. The system according to claim 11, wherein the electrostatic carrier has an electronic label.

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